







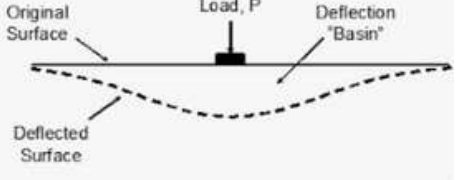




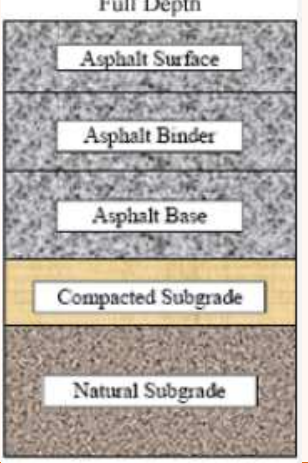


Pavement Glossary

Basic terminology with pictures

Pavement Glossary

TERMINOLOGY	DEFINITION	IMAGE
A Alligator cracks (fatigue cracks)	Interconnected cracks forming a series of small blocks resembling an alligator's skin or chicken wire.	
Asphalt Levelling Course	An asphalt course of varying thickness applied to a pavement surface to adjust its shape preparatory to overlaying with another course or applying a sprayed seal.	
Asphalt Overlay	The addition of one or more courses of pavement material to an existing road surface, generally to increase strength/stiffness and/or improve riding quality.	
Asphalt Surface Treatments	Applications of asphalt materials to any type of road or pavement surface, with or without a cover of mineral aggregate.	
B Bitumen	This is basically the residue obtained from petroleum refining. It functions like a 'glue' that holds the road together.	
Bleeding	A surface defect in which an excess of binder completely covers the aggregate. It results from the upward migration of the binder, due to a combination of traffic action, warm temperatures and other factors. It leads to a loss of surface texture.	
Blow-Up	The localised buckling or shattering of a rigid type of pavement, occurring usually at transverse crack or joint.	
C Corrugations	Transverse undulations on the road surface, closely and regularly spaced, with wavelengths less than 2 m. Often occurs in unsealed roads devoid of clay binder.	
Crack	An irregular, unplanned opening which is essentially vertical and of various widths which may intersect with others, oriented longitudinally (that is in the direction of traffic) wandering transversely or a combination.	

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	TERMINOLOGY	DEFINITION	IMAGE
D	Deflection	The vertical movement of a member or pavement due to the application of a load. It is an indication of the rate at which permanent deformation will occur under traffic, or due to other environmental or physical factors, over time.	
	Depressions	Localised areas of sunken road surfaces that may or may not be accompanied by cracking.	
	Disintegration	The breaking up of a pavement surface from its original shape.	
F	Faulting	Relative vertical movement of slabs in a Portland cement concrete pavement due to differential deformation.	
	Flushing	A pavement surface defect in which the binder is near the top of the aggregate particles. There is minimal surface texture. In severe cases, the bitumen covers the aggregate.	
	Full-Depth Asphalt Pavement	A pavement in which asphalt is used for all courses above the subgrade or improved subgrade.	
H	Hot Mix Asphalt	High-quality, thoroughly-controlled hot mixture of asphalt and well-graded, high quality aggregate, thoroughly compacted into a uniform dense mass.	
	Hydroplaning (Aquaplaning)	A condition occurring on a wet road when the tyres of a moving vehicle lose contact with the road surface and ride on a film of water.	

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	TERMINOLOGY	DEFINITION	IMAGE
L	Longitudinal Cracking	Cracks parallel to the pavement's centerline or laydown direction.	
M	Micro-Surfacing	A bituminous slurry surfacing, usually containing polymer, which is capable of being spread in variably thick layers for rut-filling and correction courses, and for wearing course applications where good surface texture is required to be maintained throughout the service life.	
P	Polishing	A pavement surface defect in which the upper faces of the aggregate become smoother and rounder, particularly in the wheel tracks, as a result of the abrasive effect of traffic, reducing the available friction between the road surface and a vehicle tyre.	
	Potholes	A hole in a pavement, frequently rounded in shape, resulting from the loss of pavement material under traffic.	
	Prime Coat	An application of a primer to a prepared base, without cover aggregate, to provide penetration of the surface, temporary waterproofing and to obtain a bond between the pavement and the subsequent seal or asphalt. It is a preliminary treatment to a more permanent bituminous surfacing.	
	Pumping	The ejection by traffic action, or ground water pressure, of water and fine particles in suspension through joints or cracks in a pavement.	
R	Ravelling	A pavement surface defect involving progressive disintegration of the pavement surface through loss of both binder and aggregates.	
	Recycling	The re-use of paving material, usually after some reprocessing.	
	Reflection Cracks	Surface cracking resulting from movement associated with cracks or joints in an underlying pavement layer.	
	Rutting	The longitudinal vertical deformation of a pavement surface in a wheelpath, measured relative to a straight edge placed at right angles to the traffic flow and across the wheelpath, with a length/width ratio greater than 4:1.	

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	TERMINOLOGY	DEFINITION	IMAGE
S	Scaling	The peeling away or disintegrating of the surface of Portland cement concrete.	
	Shoving	Lateral displacement of pavement structure by braking, accelerating or turning vehicles.	
	Skid Resistance	The frictional relationship between a pavement surface and vehicle tyres during braking or cornering manoeuvres. Normally measured on wet surfaces, it varies with the speed and the value of 'slip' adopted.	
	Slippage Cracks	A translatory failure of an overlay through failure of a bond with the undercourse, usually indicated by crescent-shaped cracks on the pavement surface.	
	Slurry Seal	A mixture of slow-setting emulsified asphalt, water, aggregate and mineral filler, produced to a slurry consistency and placed on pavement surface. It is used for preventative maintenance on existing sound pavements or as corrective maintenance to restore surface texture, correct ravelling and loss of fines, and fill minor surface cracks.	
	Spalling	A surface defect chiefly in concrete and occasionally in heavily bound pavements, where disintegration occurs at edges, joints, corners or cracks.	
T	Sprayed seal (chip seal)	A thin layer of binder sprayed onto a pavement surface with a layer of aggregate incorporated and which is impervious to water.	
	Tack Coat	A tack coat is a light application of bituminous binder that provides a bond between the existing surface and the new asphalt layer.	
	Transverse Cracks	A crack at right angles to the road centreline.	